What is Claimed Is:

1. A photomask comprising:

(a) a substantially transparent photomask substrate,

(b) a patterned area of masking material affixed to said photomask substrate, and

(c) a silica pellicle affixed to said patterned area of masking material.

2. The photomask of claim 1 wherein said silica pellicle is a fused silica pellicle.

3. The photomask of claim 1 wherein said silica pellicle is made from F-doped fused silica.

4. The photomask of claim 1 wherein said silica pellicle is made from silicon nitride.

5. The photomask of claim 1 wherein said silica pellicle is affixed to said patterned area of masking material using an adhesive.

6. The photomask of claim 1 wherein said silica pellicle is affixed to said patterned area of masking material using a reusable adhesive.

7. A method for manufacturing a device comprising the steps of:

interposing a finished photomask between a device substrate and an energy source, wherein said finished photomask comprises:

(a) a substantially transparent photomask substrate,

(b) a patterned area of masking material affixed to said photomask substrate, and

(c) a silica pellicle affixed to said patterned area of masking material;

generating energy in the energy source;

transmitting said generated energy through said desired pattern formed in said finished photomask to said device substrate; and

etching an image on said device substrate corresponding to said pattern formed in said finished photomask.

8. The method of claim 7 wherein said silica pellicle is a fused silica pellicle.

9. The method of claim 7 wherein said silica pellicle is made from F-doped fused silica.

10. The method of claim 7 wherein said pellicle is made from silicon nitride.

11. The method of claim 7 wherein said silica pellicle is affixed to said patterned area of masking material using an adhesive.

12. The method of claim 7 wherein said silica pellicle is affixed to said photomask substrate and said patterned area of masking material using a reusable adhesive.

13. An embedded-attenuated phase shift photomask comprising:

(a) a substantially transparent photomask substrate;

(b) a phase shift layer affixed to said photomask substrate;

(c) a patterned area of masking material affixed to said phase shift layer; and

(d) a silica pellicle affixed to said patterned area of masking material.

14. The embedded-attenuated phase shift photomask of claim 13 wherein said silica pellicle is a fused silica pellicle.

15. The embedded-attenuated phase shift photomask of claim 12 wherein said silica pellicle is made from F-doped fused silica.

16. The embedded-attenuated phase shift photomask of claim 13 wherein said silica pellicle is made from silicon nitride.

17. The embedded-attenuated phase shift photomask of claim 13 wherein said silica pellicle is affixed to said patterned area of masking material using an adhesive.

18. The embedded-attenuated phase shift photomask of claim 13 wherein said silica pellicle is affixed to said patterned area of masking material using a reusable adhesive.

19. An alternating aperture phase shift mask comprising:

(a) a patterned area of a substantially transparent photomask substrate,

(b) a patterned area of masking material affixed to said photomask substrate, wherein said patterned area of said substantially transparent photomask substrate alternates with said patterned area of said masking material, and

(c) a silica pellicle affixed to said patterned area of masking material.

20. The alternating aperture phase shift mask of claim 19 wherein said silica pellicle is a fused silica pellicle.

21. The alternating aperture phase shift mask of claim 19 wherein said silica pellicle is made from F-doped fused silica.

22. The alternating aperture phase shift mask of claim 19 wherein said silica pellicle is made from silicon nitride.

23. The alternating aperture phase shift mask of claim 19 wherein said silica pellicle is affixed to said patterned area of masking material using an adhesive.

24. The alternating aperture phase shift mask of claim 19 wherein said silica pellicle is affixed to said said patterned area of masking material using a reusable adhesive.

25. A method for manufacturing a device comprising the steps of:

interposing a finished embedded-attenuated phase shift photomask between a device substrate and an energy source, wherein said finished embedded-attenuated phase shift photomask comprises:

(a) a substantially transparent photomask substrate,

(b) a phase shift layer affixed to said photomask substrate,

(b) a patterned area of masking material affixed to said phase shift layer, and

(c) a silica pellicle affixed to said patterned area of masking material;

generating energy in said energy source;

transmitting said generated energy through said desired pattern formed in said finished photomask to said device substrate; and

etching an image on said device substrate corresponding to said pattern formed in said finished embedded-attenuated phase shift photomask.

26. The method of claim 25 wherein said silica pellicle is a fused silica pellicle.

27. The method of claim 25 wherein said silica pellicle is made from F-doped fused silica.

28. The method of claim 25 wherein said silica pellicle is made from silicon nitride.

29. The method of claim 25 wherein said silica pellicle is affixed to said patterned area of masking material using an adhesive.

30. The method of claim 25 wherein said silica pellicle is affixed to said patterned area of masking material using a reusable adhesive.

31. A method for manufacturing a device comprising the steps of:

interposing a finished alternating aperture phase shift mask between a device substrate and an energy source, wherein said finished alternating aperture phase shift mask comprises:

(a) a patterned area of a substantially transparent photomask substrate,

(b) a patterned area of masking material affixed to said photomask substrate, wherein said patterned area of said substantially transparent photomask substrate alternates with said patterned area of said masking material, and

(c) a silica pellicle affixed to said patterned area of masking material;

generating energy in the energy source;

transmitting said generated energy through said desired pattern formed in said finished photomask to said device substrate; and

etching an image on said device substrate corresponding to said pattern formed in said finished photomask.

32. The method of claim 31 wherein said silica pellicle is a fused silica pellicle.

33. The method of claim 31 wherein said silica pellicle is made from F-doped fused silica.

34. The method of claim 31 wherein said silica pellicle is made from silicon nitride.

35. The method of claim 31 wherein said silica pellicle is affixed to said photomask substrate and said patterned area of masking material using an adhesive.

36. The method of claim 31 wherein said silica pellicle is affixed to said photomask substrate and said patterned area of masking material using a reusable adhesive.

37. A photomask comprising:

(a) a substantially transparent photomask substrate,

(b) a patterned area of masking material affixed to said photomask substrate,

(c) a planarization layer affixed to the top surface of said patterned area of masking material, and

(d) a silica pellicle affixed to said planarization layer.

38. The photomask of claim 37 wherein said silica pellicle is a fused silica pellicle.

39. The photomask of claim 37 wherein said silica pellicle is made from F-doped fused silica.

40. The photomask of claim 37 wherein said silica pellicle is made from silicon nitride.

41. The photomask of claim 37 wherein said silica pellicle is affixed to said planarization layer using an adhesive.

42. The photomask of claim 37 wherein said planarization layer is an adhesive.

43. The photomask of claim 37 wherein said planarization layer is comprised of silicon dioxide.

44. The photomask of claim 37 wherein said planarization layer is comprised of spin-on glass.

45. The photomask of claim 37 wherein said planarization layer is comprised of an organic material.

46. The photomask of claim 37 wherein said planarization layer is comprised of an inorganic material.

47. The photomask of claim 37 wherein said silica pellicle is affixed to said planarization layer using a reusable adhesive.

48. A method for manufacturing a device comprising the steps of:

interposing a finished photomask between a device substrate and an energy source, wherein said finished photomask comprises:

(a) a substantially transparent photomask substrate,

(b) a patterned area of masking material affixed to said photomask substrate,

(c) a planarization layer affixed to the top surface of said patterned area of masking material, and

(d) a silica pellicle affixed to said planarization layer;

transmitting said generated energy through said desired pattern formed in said finished photomask to said device substrate; and

etching an image on said device substrate corresponding to said pattern formed in said finished photomask.

49. The method of claim 48 wherein said silica pellicle is a fused silica pellicle.

50. The method of claim 48 wherein said silica pellicle is made from F-doped fused silica.

51. The method of claim 48 wherein said silica pellicle is made from silicon nitride.

52. The method of claim 48 wherein said silica pellicle is affixed to said planarization layer using an adhesive.

53. The method of claim 48 wherein said planarization layer is an adhesive.

54. The method of claim 48 wherein said planarization layer is comprised of silicon dioxide.

55. The method of claim 48 wherein said planarization layer is comprised of spin-on glass.

56. The method of claim 48 wherein said planarization layer is comprised of an organic material.

57. The method of claim 48 wherein said planarization layer is comprised of an inorganic material.

58. The method of claim 48 wherein said silica pellicle is affixed to said planarization layer using a reusable adhesive.